

SPRING VALLEY • WESLEY HEIGHTS
Citizens Association
WASHINGTON, D.C.

TESTIMONY OF DR. JEFFREY KRASKIN, PRESIDENT
SPRING VALLEY-WESLEY HEIGHTS CITIZENS ASSOCIATION
ZC 16-23 --- JANUARY 7, 2019

Summary of Testimony

- SVWHCA supports neighborhood consistent density development of this site
- SVWHCA Board opposes the present proposal due to
 - Potential traffic hazards;
 - Pedestrian safety – proposed sidewalk design create potential for pedestrian hazards and dangerous conditions;
 - Reliance on narrow alley access for all vehicular traffic and deliveries;
 - Traffic planning does not meet industry practices recommended by American Association of State Highway and Transportation Officials (AASHTO), Federal Highway Administration (FHWA), National Association of City Transportation Officials (NACTO), and Institute of Transportation Engineers;
 - DDOT relies on woefully outdated data not taking into account new business additions and existing failed intersections;
 - High density development is inconsistent with existing neighborhood.
- Project fails to comply with Section 604.7(a), 604.7(b), 604.7(f) of Design Review Guidelines. The Valor Proposal does NOT
 - Encourage Pedestrian Activity;
 - Provide true Public Gathering and Open Spaces;
 - Provide Safe Pedestrian Movement Through Site;
 - Connect Site to Surrounding Community Through Safe Pedestrian Connections.
- Grocery Stores: 3 “full” service grocers existed in this two-block commercial area into the 1970s – Giant, Safeway, A&P – also a Magruders and Wagshal’s Deli. As larger stores were created, such as Super Giant, the existing stores closed/moved to larger properties. A&P (renamed SuperFresh) moved into the present site for larger space at the time. Even that store closed followed by Fresh n’ Greens which also closed. Smaller boutique grocers – Balducci’s and Sutton Place Gourmet failed in the neighborhood. 13,000 to 18,000 square foot of retail space for a grocer can NOT provide the services of today’s standard grocery which has 55,000 square foot space.
- Numerous grocers exist within a 2-mile radius including the newest Wegmans which will be only one-half mile away at the former Fannie Mae site.
- 4801 Massachusetts Avenue building should NOT be the basis upon which future development of this site is based. 4801 Massachusetts Avenue is the anomaly in the neighborhood not the standard.

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ZC 16-23 --- JANUARY 7, 2019

Good evening Chairman Hood and Commissioners. I am Dr. Jeffrey Kraskin and am here tonight representing the Board of the long-standing Spring Valley-Wesley Heights Citizens Association (SVWHCA). We are joining and sharing this opposition with Neighbors for a Livable Community (NLC) and the Spring Valley West Homeowners Association – two other neighborhood groups that have worked over many years to protect neighborhood property values and make ours a neighborhood that continues to attract new families.

The SVWHCA Board has met numerous times since the last hearing on this case – ZC 16-23, most recently on December 11, 2018. Our Board has examined this project closely with a goal of finding a way to support this project, as we stated in our December 20, 2018 submission. **(Attachment A)** We support development of the site. But, precisely because of the impact of the proposed project – even with the changes proposed – especially for traffic and safety in our community – the SVWHCA Board unanimously approved a resolution directing me to come before you tonight to speak in opposition to the present plan offered by the Valor Corporation in conjunction with Mill Creek Developers.

As personal background, my family has resided in the District of Columbia for four generations. My immediate family has resided in the AU Heights – Spring Valley neighborhood since building our family home in 1959 – nearly 60 years ago. I have personally observed the various changes that have impacted our neighborhood – both good and bad over those years. These changes have included watching a small liberal arts university grow dramatically in size while at the same time observing neighborhood serving businesses leave.

I have had the pleasure to work over the years with many of my neighbors to help bring businesses to our community from Chicken Out to Crate and Barrel, while at the same time working with neighbors in both AU Park and Spring Valley to ensure that the overall low density character of the neighborhood that continues to bring new people and families to the community remains. It was the demolition of the Apex theater block in the late 1970s to make way for the “modern” day brick box construction of the office/retail building at 4801 Massachusetts Avenue that was a major wake-up call for our neighborhood. The building, which is non-conforming, was a dismal failure, and as you are aware was finally purchased by the American University to initially house its Washington College of Law (WCL) which has now moved to the Tenley site.

It was this new construction that led the community to seek protection for the remaining low density one and two-story building retail centers on both sides of Massachusetts that is the dominant characteristic of the commercial development in both Spring Valley and AU Park. These sites ultimately were granted DC and federal historic designation.

In reality, the commercial area of Spring Valley is primarily no taller than 2-stories, but is only one story on the American University Park side of Massachusetts Avenue – except for the white elephant anomaly that is being used in this case by the developer and the DC Office of Planning (OP) to justify the construction of yet another building that is out of character with the neighborhood.

Despite all the confusing and highly technical arguments that are being made before the Commission tonight, I want to keep my remarks basic and simple. The proposed building is out of character for the neighborhood. This project will bring with it significant new traffic and parking problems. The reliance on narrow alleys for the movement of traffic and access to the residential and retail units in the new building demonstrate this site is not appropriate for the density that is being proposed. The site's infrastructure does not support the density that is being proposed. Traffic planning at the site does not meet industry practices, including those recommended by the American Association of State Highway and Transportation Officials (AASHTO), the Federal Highway Administration (FHWA), the National Association of City Transportation Officials (NACTO), and the Institute of Transportation Engineers. Additionally, Nova Technology, which specializes in in the design of loading docks and related traffic flow, recommends for truck safety reasons that two-way access roads used to access loading dock be a minimum of 26 feet wide, not the 20 feet proposed for this project. **(Attachment B)** Some experts recommend a width of 38 feet if there is an adjacent sidewalk as is proposed by Valor. The project's design for walkways, sidewalks, and public spaces falls short of recommendations made by the FHWA. **(Attachment C)** In fact, based on the recommendations outlined in the FHWA report

attached to this testimony, the sidewalk design proposed by Valor will invite pedestrian hazards and create dangerous conditions.

These are just some of the shortcomings which demonstrate the project, as revised, will have an adverse impact on neighbors and is not “superior in design” and, consequently, does not meet the purposes of the design review process outlined in Section 600.1 and 600.5 of the DC Zoning Code. The plans for this project also at a minimum glaringly fail to comply with Section 604.7 (a), 604.7(b), and 604.7 (f) of the Design Review Guidelines in that it does not

- (a) Encourage pedestrian activity;
- (b) Provide public gathering and open spaces; and
- (c) Provide for safe pedestrian movement through the site or connect the site to the surrounding community through safe pedestrian connections.

In short, the site does not lend itself to this scale of development – therefore, the need for the developer to enter into secret agreements.

For most of us who choose to live in Spring Valley, we are motivated to live here because of its low density residential character. It is easy for those who do not live near the site to support this project. They live far enough away to find other alternative neighborhood streets to cut through to avoid Massachusetts Avenue and be immune from the traffic nightmares and hazards that are not part of living anywhere near Massachusetts Avenue. It is fitting that some of those who most strongly oppose the project, including the 32 Spring Valley Court homeowners who submitted a petition in opposition (**Exhibit 278**), are those who live in single-family homes nearest the proposed site or closest to Massachusetts Avenue.

It is for these reasons that we oppose this project in its current form.

In its proposal, Valor continues to promote the project on the basis of adding a full-service grocery store amenity to the neighborhood. For those of us who have lived in the neighborhood and know its history, we lost three of the four grocery stores operating in our neighborhood over a relatively short few years. Then, we lost the last grocery store – the Super Fresh and then the short-lived Fresh and Greens that occupied the site proposed for new construction as well as a nearby Balducci's that had begun as a Sutton Place Gourmet.

Like others, I wish we could go back in time to have a full-service grocery store within walking distance of my home. But, in reality, a 13,000 – 18,000 square foot grocery, as is being proposed in this application, is not a full-service grocery by today's standards. We are being asked to trade density and all that such density brings with it – in the form of additional traffic and parking congestion – for the convenience of picking up that item we forgot to buy when we went to the 55,000 square foot groceries where we have grown accustomed to shopping. In fact, as can be seen in **Attachment D**, our neighborhood is well served, if not over served, by the many large full-service grocery options available to us within two miles of my home and this site. Additionally, Mayor Bowser just recently made the announcement of the newest grocer to open on Wisconsin Avenue at the former Fannie Mae site – still within the two-mile area. How frustrating it must be to our fellow residents in other areas of DC who only wish they had all these choices.

As I was growing up, I remember so clearly in the late 1960s always running down the two blocks to the Safeway at the corner of 48th and Massachusetts Avenue to

retrieve my beagle, which had been given to me by then-President Lyndon B. Johnson, who was a neighbor before moving into the White House, because that is where she would end up when getting out of the house. I recall sitting at the People's Drug counter for a barbeque sandwich with coleslaw; going to the movies at the Apex movie theater; deciding which hardware store I was going to – the one next to Wagshal's Deli or the one next to the A&P grocery on Yuma Street where today Jean Paul Salon and DeCarlo's Restaurant operate successful neighborhood-serving businesses; or do I go to the Giant grocery in the shopping center that CVS now occupies – the same site where People's Drug moved after the Giant left and the Apex Theater shopping complex was torn down in 1977. I also recall shopping with my parents in Garfinkel's where my immediate neighbor, like many of the women in the neighborhood, worked.

I mention all of this simply to say our neighborhood, like many neighborhoods, has changed over these past decades.

Although the proposed new building will be built along neighborhood streets and not Massachusetts Avenue (contrary to OP's conclusions), Valor as well as OP justify their support for this project by pointing to its consistency with AU's Spring Valley Building at 4801 Massachusetts Avenue. Until recently, that building housed the AU School of Law, but the building's history is far more torturous.

The construction of 4801 Massachusetts Avenue was to many in the neighborhood our first introduction to a developer's manipulation of DC zoning and building codes – including measuring the ultimate height from the highest point on 48th Street to placing a steel beam across the "private" alley to tie the lots of record together allowing for increased FAR. This action alone continues to play a role in the case

before you tonight. The applicant and OP could not argue in support of this new project were it not that a building that still stands as a white elephant was able to be built along a low-density commercial strip in a low-density residential neighborhood.

A simple drive from Ward Circle to Westmoreland Circle today clearly demonstrates that the AU Park and Spring Valley neighborhoods along this stretch of Massachusetts Avenue consist only of single-family homes except for the small two-story non-conforming apartment dwellings on 47th Street between Tilden and Upton Streets built to resemble the colonial style houses of the existing neighborhood. In fact, the concept of residential high-rise apartment dwellings has been discussed over the years but rejected consistently by the community. The most recent was in the late 1970s during the early iterations of what is today referred to as Spring Valley West. Even the PUD known as Spring Valley Court was initially designed as a high-density townhome community as indicated in ZC 75-12 but changed to the PUD in ZC 75-18.

This new project, if approved, will radically alter the character of our neighborhood. Other than some university dorms, there are no high-rise apartment buildings from Ward Circle to Westbard in Bethesda, Maryland, along the Massachusetts Avenue corridor. Commercial development is limited to a two-block area with most of that area designated historic by the local and federal government. The historic designation of these sites was initiated by residents of AU Park and Spring Valley in part to protect the character of our neighborhood and forestall the type of white elephant development on Massachusetts Avenue in our neighborhoods that resulted from the demolition of the Apex Theatre block. The new development proposed by Valor might be compatible along the Connecticut or Wisconsin Avenue corridors, but not

along the upper Massachusetts Avenue corridor unless city planners are now trying to reshape a neighborhood where people have chosen to live precisely because of its low-density characteristics.

What is most frustrating about proceedings like this today in our city is that developers manipulate data to achieve their desired result and unfortunately, city agencies accept the results. Take for example, DDOT's reliance on a traffic study in which the data is two years old and woefully outdated. In what business would you make decisions based on data that was at least two years old. Frankly, what other city would operate the same way? We deserve better from our so-called expert agencies.

No reasonable person could conclude that this project will have minimal traffic impacts on the neighborhood. Traffic already is a severe problem along Massachusetts Avenue and growing worse – in part by the continued and uncontrolled growth of AU and the amount of development in nearby Montgomery County.

For some in our city, they believe any empty lot needs a crane on it and measure the livability of a city on the basis of how many cranes are operating and how much density we can bring to an empty site.

The density of development that may be appropriate downtown or even along the Connecticut Avenue or Wisconsin Avenue corridors is not appropriate for the Massachusetts Avenue corridor traversing through Spring Valley and AU Park.

We cannot support this project as planned and encourage the Zoning Commission either to advise the developer to enter into negotiations with opponents to scale back this development or simply reject it outright.

ATTACHMENT A

December 20, 2018

The Honorable Anthony Hood, Chair
D.C. Zoning Commission
441 4th Street NW, Suite 200S
Washington, D.C. 20001

**RE: Z.C. Case No. 16-23: Valor Development, LLC – Voluntary Design Review
For Square 1499, Lots 802, 803, 806, and 807; Joint Parties In Opposition
Comments On Applicant’s Submission of Revised Plans and Supporting
Information and Supplemental Transportation Memorandum**

Dear Chairman Hood and Commissioners:

The joint parties in opposition – the Spring Valley-Wesley Heights Citizens Association (SVWHCA), Neighbors for a Livable Community (NLC), and the Spring Valley West Homeowners Association (SVWFOA) – have reviewed the revised plans and supplemental transportation report submitted by Valor Development in the above referenced case. Our goal – consistent with the request from Zoning Commission Chairman Anthony Hood at the June 25, 2018 public meeting (and the spirit of his comments) – has been to work collegially with Valor to achieve changes in the proposed design that would enable our organizations to support the proposal outlined by the Applicant for development of the former SuperFresh site.

Valor offered to meet with representatives of SVWHCA and NLC on October 17, 2018 – one day after the revised plans were submitted to the Zoning Commission – to discuss the revised submission. Although the initial application in this case was filed in October 2016, Valor had not been willing to meet with SVWHCA and NLC in this case – despite our requests and obvious stake in the outcome of this proceeding. We appreciate the efforts of Chairman Hood at the June 25, 2018 meeting to encourage Valor to “just work with all the parties involved.”

At the October 17, 2018 meeting with a Valor representative, SVWHCA and NLC representatives stressed that our goal was to get to a “yes” on this project. Based on the presentation, we observed that the application was still lacking clarity on several critical issues. These included uncertainty on the traffic circulation pattern at the site; a parking agreement with American University that still had not then been finalized; uncertainty over the identity of a grocer at the site and whether Valor had obtained a firm commitment from any grocer; and the absence of any new data at that time on traffic impacts.

SVWHCA and NLC representatives expressed concern that Valor’s continued focus on including a grocery “amenity” (that the developer still could not confirm) which they believed responded to community needs would instead have the effect of displacing other current successful retail operators that have serviced the immediate neighborhoods for many years. We encouraged Valor to be more flexible in its use of available retail space in the project, especially given that residents are not suffering from a grocery store “desert” as is the case in some parts of the city. Eight (8) full-service grocery stores operate within about a mile of our neighborhoods

and an alternative small grocer (Wagshal's) already operates at Spring Valley Shopping Center adjacent to the proposed project site.

SVWHCA and NLC representatives asked if Valor was open to making changes in its Zoning Commission submission prior to the January 7, 2019 hearing. Valor said that it would not make any changes prior to the January 7, 2019 hearing in response to neighborhood concerns or recommendations.

The obvious question is: why did Valor not meet with us before they reached a stage at which the company would not consider additional changes? Nevertheless, we indicated our commitment to review the project, including the new transportation information that was not submitted until six weeks later, with a goal of supporting the project.

The parties in opposition in this case (SVWHCA, NLC, and SVWHO) have long supported development of the site in a way that would enhance and add value to the community. Our primary joint concern for the project proposed by Valor at this site has been the overall impact on pedestrian and vehicular traffic, especially as it impacts Spring Valley and other nearby residential areas. The hazardous conditions for drivers and pedestrians as a consequence of this project have been underestimated and insufficient measures have been proposed to mitigate those conditions. In fact, we believe some of the mitigation measures proposed will actually exacerbate existing conditions.


Based on our review of the revised submission and supplemental transportation memorandum, we now reaffirm our opposition to the project. We believe the project will lead to increased traffic and pedestrian hazards that are not mitigated by the measures proposed by Valor in its submission. Moreover, visual renderings provided by the architect in the revised submission continue to be misleading. Other information, particularly on parking, provided in the November 29, 2018 Supplemental Transportation Memorandum appears to be inconsistent with the October 16, 2018 submission provided by Valor and, as such, warrants clarification. We will continue to carefully review these materials along with the Applicant's December 18, 2018 response (Exhibit 252) to the December 11, 2018 submission filed by Citizens For Responsible Development (CRD) (Exhibit 247) in hope of gaining additional clarity prior to the January 7, 2019 hearing.

Further complicating the picture is that traffic data on which the developer and the District Department of Transportation (DDOT) are relying to assess traffic impacts are more than two years old and were collected long before (a) other new development has been completed in the immediate area and (b) uses of the adjacent AU property have changed significantly – both of which have significantly impacted traffic and parking in the surrounding neighborhoods. We are disappointed that Valor did not “refresh” its traffic study as part of its Revised Plans in order to address the significant concerns about traffic impacts, especially given the changes in the surrounding neighborhood that already have contributed to increased traffic and more hazardous conditions for pedestrians and drivers.

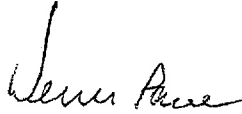
We also are disappointed the proposed unit size is still incompatible with the interests of current empty nester-residents seeking to downsize, but stay in the neighborhood.

Despite the initial presentation having been made by Valor in late 2015, the parties in opposition still believe that Valor can design a project for the site that would win broad support from within the community and mitigate potential pedestrian and vehicular traffic hazards. We are prepared and committed to work with all parties to achieve that objective.


Sincerely,



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Certificate of Service

We hereby certify that on December 20, 2018, copies of the attached were sent by mail or email to the following:

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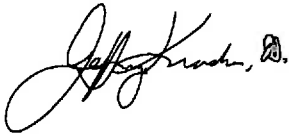
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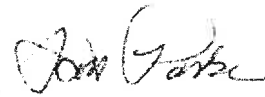
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December 20, 2018

ATTACHMENT B



**DOCK
PLANNING
STANDARDS**

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DESIGN THE SITE

Safety

The Material Transfer Zone (MTZ), which acts as a bridge between the truck and warehouse, is a dangerous place where safety must be the most important consideration.

Safety is often considered only after a serious accident has occurred on the dock. To ensure the safety of dock attendants and product, consider all potential problems that could occur.

Consider security. Select the correct dock leveler for your facility. For additional safety at the loading dock, consider adding a vehicle restraint to help prevent unexpected trailer creep during the loading and unloading process.

Perform regular maintenance on the equipment. Equipment should be cleaned, lubricated and checked by a technician for longer product life and better productivity. Plan for maintenance of bumpers, lights, communication packages, and other loading dock accessories. Inventory these items regularly as wheel chocks can be swept away by plows and light bulbs will need to be replaced. Perform regular checks on the seals and shelters to make sure they do not leak. Infiltrating air will raise energy usage and may result in uncomfortable working conditions.

Protect your investment. Choose a barrier gate that prevents loading equipment from colliding with and damaging the dock doors. A barrier gate acts as a protective barrier against costly door damage.

Integrated control panels are useful when combining dock and overhead doors with other loading equipment. If you have combined a dockleveler with a trailer restraint and an automatic door, interconnecting each into a single control panel is an effective way to create a safer work environment.

Select the appropriate dockleveler capacity based on both the gross load and frequency of material handling devices in use at the site for optimal durability and safety. Also consider push button controlled powered docklevelers for ergonomic and ease of operation reasons as they put less physical stress on the dock attendants. If non-powered mechanical docklevelers are already present, consider upgrading the dockleveler to a push button controlled powered dockleveler with a hydraulic conversion kit.

Location of the Loading Docks

Locate the loading docks to minimize forklift traffic inside the building. Rather than transporting individual pallets inside the building, unload trucks at multiple docks.

Shipping docks and receiving docks can be combined, with shipping and receiving together (Figure 1), or they can be separated, with shipping and receiving in different areas of the building (Figure 2).

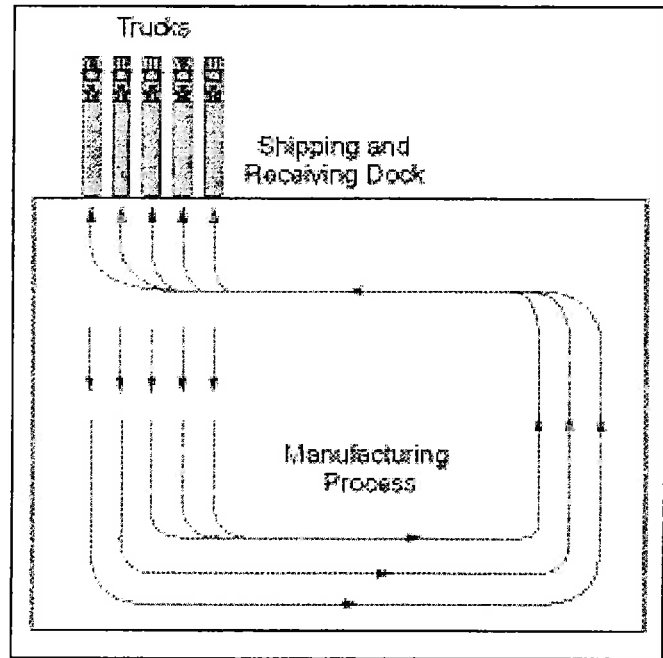


Figure 1

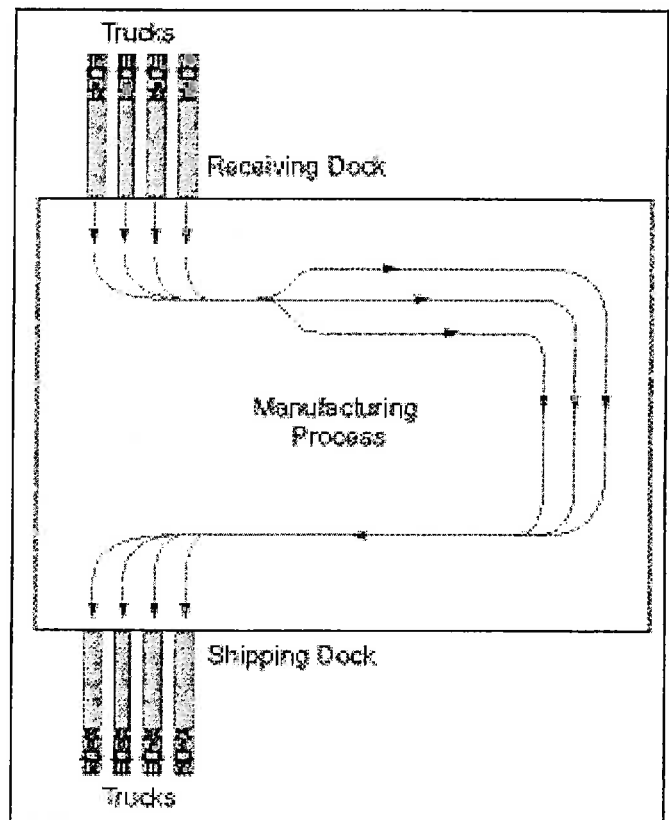


Figure 2

Choose the loading dock location based on the needs of the in-plant process. A combined dock works well in smaller buildings where shipping and receiving is infrequent. However, this design may increase in-plant traffic and travel distance.

A separated dock works well in buildings where the materials enter production in one part of the building and the production is completed elsewhere. This design minimizes transportation of materials inside the building.

Plan On-site Traffic Patterns

Design the traffic patterns around the building so that the truck driver is on the inside of each turn, for best control of the truck. Where traffic is on the right side of the road and the driver's seat is on the left side of the cab, truck movement around the building should be counterclockwise (Figure 3).

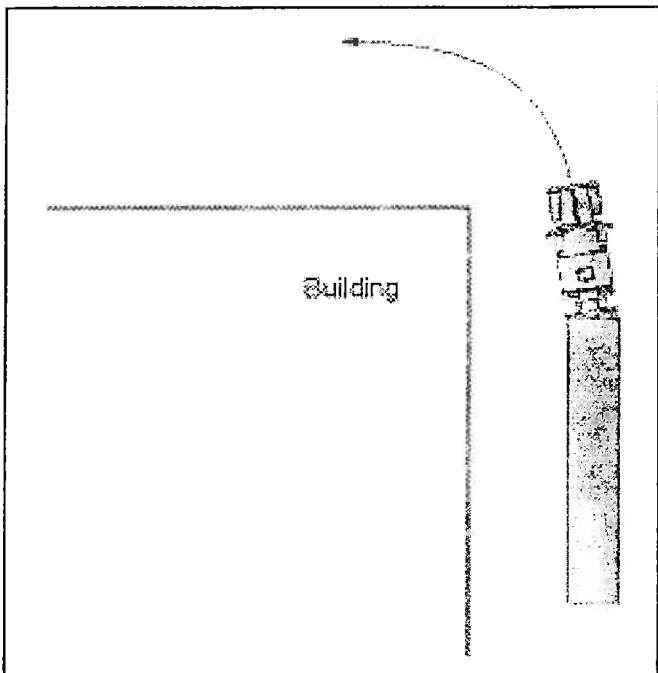


Figure 3

For efficient truck traffic, plan for the following:

- An entrance driveway that accommodates the turning radius of the longest truck expected and allows trucks to be driven forward onto the site, rather than backed up
- Right-angle turns onto the site that have a minimum inside radius of 26 ft and a minimum outside radius of 50 ft (Figure 4)
- One-way access roads that are 13 ft wide minimum (Figure 4)

- Two-way access roads that are 26 ft wide minimum (Figure 4)

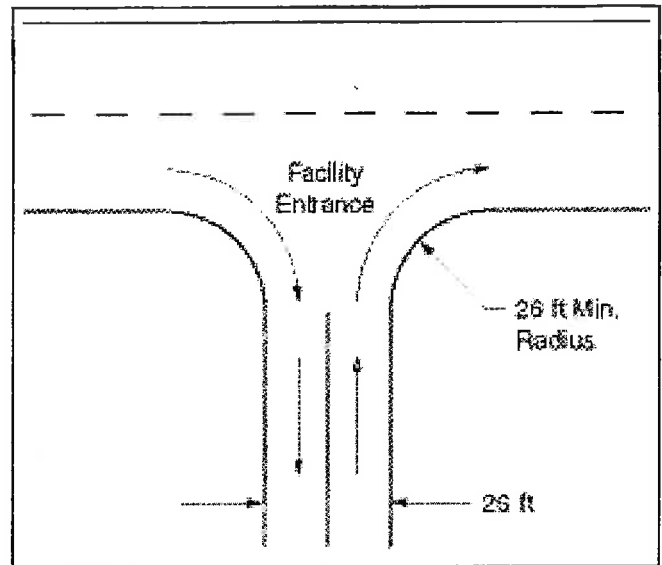


Figure 4

- Separate roads for employee traffic
- Truck waiting areas near the loading docks to accommodate all waiting trucks

Design the Apron Space

Apron space is the space between the loading platform and the nearest obstruction. Apron space includes the parking area where the truck parks at the dock and the maneuvering area, which is the area the truck uses to maneuver in and out of the parking area (Figure 5) and (Figure 6). The recommended center distance between dock positions is 12 ft minimum.

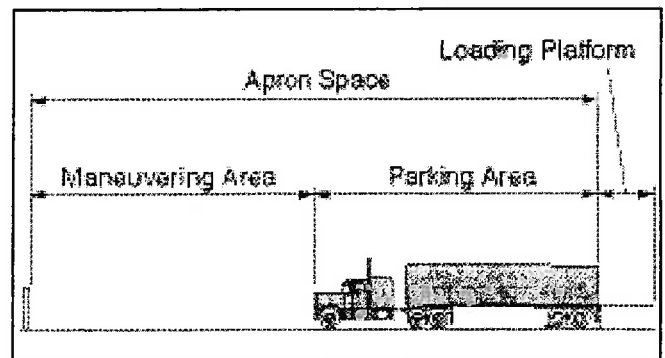


Figure 5

DOCK PLANNING STANDARDS

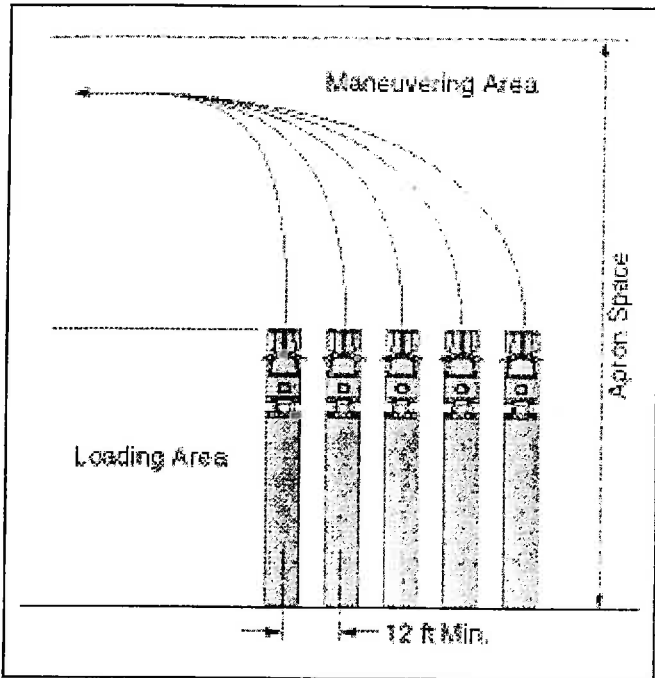


Figure 6

The minimum apron space required depends on the:

- Center line distances between the parked trucks at the dock
- Length of the trucks
- Steering geometry of the trucks

Less apron space is needed if the trailers will be parked with the tractors detached.

The minimum apron space for a typical 40 ft container rig is listed in Table 1.

Table 1

Center Distance	12 ft	13 ft	14 ft	16 ft	18 ft
Apron Space	120 ft	116 ft	113 ft	110 ft	108 ft

If expected trucks are longer than 40 ft, increase the apron space proportionately. For example, if the dock can accommodate 48 ft trailers, increase the apron space in the table by 20%. If the traffic pattern causes the driver to be on the outside of a turn, add 50 ft.

Always provide a concrete landing gear pad to support the trailer's landing gear when the trailer is detached (Figure 7). The landing gear is about 33 ft from the back of the trailer on a standard 40 ft container chassis. The gear is about 11 ft from the back of the trailer on a 20 ft chassis. The pad should be wide enough to accommodate all expected types of trailers. It is helpful for the pad to extend all the way back to the loading platform. The pad should be designed to support two point loads of 25,000 lb each, 6 ft apart, to support a fully loaded trailer.

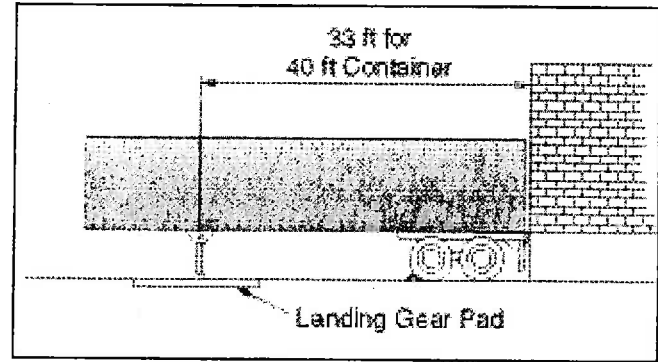


Figure 7

Dock Approach

The maximum grade percentage from the loading dock to the vehicle is determined by the height of the dock (discussed in detail in Set the Dock Height on page 10). When using electric powered loading equipment, the maximum grade percentage is 10%. For gas or diesel powered loading equipment the maximum grade percentage is 15%. If these grade percentages are exceeded, damage to handling equipment and load spillage may result.

If the plant floor is at grade, or has a low grade, recess the truck parking area so that the trailer bed will be at about the same height as the plant floor (Figure 8). The parking area will slope down toward the dock. This slope should be 6% or less. If heavy loads are expected, the slope should not exceed 5%. If necessary, slope may be increased to an absolute maximum of 10%, and only for light loads. Steep slopes may cause loads to topple.

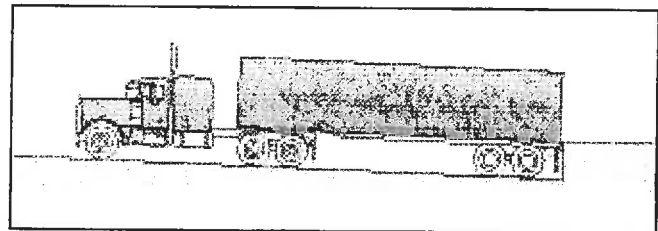


Figure 8

Always provide drainage for recessed parking areas. The area next to the building should slope slightly away from the building for a short distance of 1 to 3 ft (Figure 9). A short distance is preferable so that the position of the trailer's rear axle will have less of an effect on the height of the trailer bed at the dock.

ATTACHMENT C

L E S S O N 13

Walkways, Sidewalks, and Public Spaces

13.1 Purpose

No single design feature can ensure that a streetscape will be attractive to pedestrians. Rather, the best places for walking combine many design elements to create streets that “feel right” to people on foot. Street trees, separation from traffic, seating areas, pavement design, lighting, and many other factors should be considered in locations where pedestrian travel is accommodated and encouraged. This lesson provides an overview of these design elements, with examples of successful streetscapes throughout the United States.

13.2 Basic Urban Sidewalk Requirements

All urban sidewalks require the following basic ingredients for success: adequate width of travel lanes, a buffer from the travel lane, curbing, minimum width, gentle cross-slope (2 percent or less), a buffer to private properties, adequate sight distances around corners and at driveways, shy distances to walls and other structures, a clear path of travel free of street furniture, continuity, a well-maintained condition, ramps at corners, and flat areas across driveways. Sidewalks also require sufficient storage capacity at corners so that the predicted volume of pedestrians can

gain access to and depart from signalized intersections in an orderly and efficient manner.

Minimum Width of Sidewalks

Sidewalks require a minimum width of 5.0 feet if set back from the curb or 6.0 feet if at the curb face. Any width less than this does not meet the minimum requirements for people with disabilities. Walking is a social activity. For any two people to walk together, 5.0 feet of space is the bare minimum. In some areas, such as near schools, sporting complexes, some parks, and many shopping districts, the minimum width for a sidewalk is 8.0 feet. Thus, any existing 4.0-foot-wide sidewalks (permitted as an AASHTO minimum) often force pedestrians into the roadway



in order to talk. Even children walking to school find that a 4.0-foot width is not adequate.

Desirable Sidewalk Width

The desirable width for a sidewalk is often much greater. Some shopping districts require 12, 20, 30, and even 40 feet of width to handle the volumes of pedestrian traffic they encounter. Pennsylvania Avenue in Washington, D.C. has 30-foot sidewalk sections to handle tour bus operations, K Street in Washington, D.C. has 20-foot sections to handle transit off-loading and commercial activity, the commercially successful Paseo de Gracia boulevard in Barcelona, Spain has 36 to 48 feet in most sections.

Designers must pay close attention to minimums, and only use variances below these levels for short sections. On the other side of the width equation, overly ample sidewalk widths are rarely justified. It is essential to work out the peak volumes of transit discharge, the likely commercial appeal of an area, and the influence of large tour buses and other factors when designing public space.

Chapter 13 of the *Highway Capacity Manual* covers the topics of sidewalk width and pedestrian level of service.



Including amenities such as newspaper stands and kiosks along corners creates lively, more defined spaces; however, they should not interrupt the flow of pedestrian traffic.



For two people to walk abreast, 5 feet is the bare minimum for sidewalk width.

Be sure to calculate the commercial need for outdoor cafes, kiosks, corner gathering spots, and other social needs for a sidewalk. Sidewalk widths have not been given sufficient attention by most designers. When working in a commercial area, designers should always consult property owners, chambers of commerce, and landscape architects to make certain that the desired width is realistic. Corner or mid-block

bulb-outs can be used to their advantage for creating both storage space for roadway crossings and for social space.

The safety needs of motorists and bicyclists in the roadway must be considered when determining the desirable widths of adjacent sidewalks. There is compelling evidence that generous lane width (12-foot) standards applied to downtown and commercial streets are counterproductive and lead to faster traffic.

AASHTO specifically permits 10- or 11-foot travel lanes on arterials in commercial districts, and also permits turning lanes to be restricted to 10 feet. Truck volumes and the volume of bicycles must also be factored into this equation. As a general rule, when speeds are at or near bicycle speeds (15 to 20 mph), then bike lanes may not be as essential as the

appropriate width of sidewalk. The designer is reminded that in Central Business Districts (CBD), the pedestrian volume may be 50 to 90 percent of total traffic. When these needs are not met, the commercial and social success of the community is lessened, and safety may be compromised.

Paving Materials

Although most sidewalks are made of concrete, in some instances, asphalt can provide a useful surface. On trails, joggers and some others prefer asphalt. As a general rule,

however, the long life of concrete, and the distinct pattern and lighter color are preferred. Paver stones can also be used, and in some applications, they have distinct advantages (see section later in this lesson).

Border Areas and Buffers

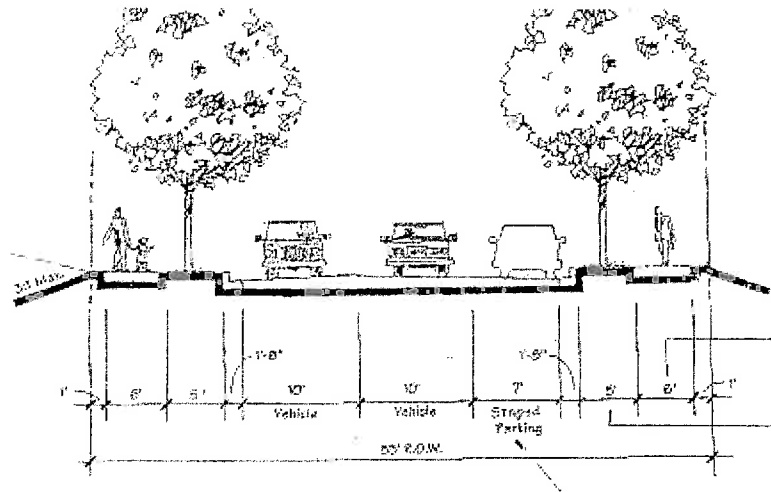
A border area should be provided along streets for the safety of motorists and pedestrians as well as for aesthetic reasons. The border area between the roadway and the right-of-way line should be wide enough to serve several purposes, including provision of a buffer space between pedestrians and vehicular traffic, sidewalk space, snow storage, an area for placement of underground utilities, and an area for maintainable esthetic features such as grass or other landscaping. The border width may be a minimum of 5 feet, but desirably, it should be 10 feet or wider. Wherever practical, an additional obstacle-free buffer width of 12 feet or more should be provided between the curb and the sidewalk for safety and environmental enhancement. In residential areas, wider building setback controls can be used to attain these features. (AASHTO, *A Policy on Geometric Design of Highways & Streets*, 1990)

The preferred minimum width for a nature strip is 5 to 7 feet. A nature strip this wide provides ample storage room for many utilities. The width provides:

- An essential buffer between an out-of-control motorist and a pedestrian.
- Improved sight distances at driveways.
- Adequate width for landscaping and street trees.

A tree set back from the roadway 4.0 feet meets minimum AASHTO standards for fixed objects when a barrier curb is used (30 mph or less), and is adequate for most species. The area is ample for most snow storage. When this preferred minimum cannot be achieved, any width, down to 4.0 feet or even 2.0 feet, is still beneficial.

Nature strips, especially in downtown areas, may be a good location to use paver stones for easy and affordable access to underground utilities. In



The width of a natural buffer provides the essential space needed for situations such as protecting pedestrians from out-of-control vehicles.

downtown areas, nature strips are also a convenient location for the swing-width of a door, for placement of parking meters, hydrants, lampposts, and other furniture.

Another way to achieve border width and the needed buffer from traffic is to provide bike lanes. This 5-foot space creates a minimal safe width to the sidewalk, even when at the back of the curb; reduces the effects of noise and splashing; and provides a higher level of general comfort to the pedestrian.

On-street parking has two distinct advantages for the pedestrian. First, it creates the needed physical separation from the motorist. Second, on-street parking has been shown to reduce motorist travel speeds. This creates an environment for safer street crossings.

On the back side of sidewalks, a minimum width buffer of 1 to 3 feet is essential. Without such a buffer, vegetation, walls, buildings, and other objects encroach on the usable sidewalk space. With just several months of growth, many shrubs will dominate a sidewalk space. This setback is essential, not only to the walking comfort of a pedestrian, but to ensure essential sight lines at each residential and commercial driveway.

Placement of Street Furniture/Shy Distances

Pedestrians require a shy distance from fixed objects, such as walls, fences, shrubs, buildings, parked cars, and other features. The desired shy distance for a



Parked cars can also serve as a buffer between the sidewalk and the street.

pedestrian is 2.0 feet. Allow for this shy distance in determining the functional width of a sidewalk.

Note that attractive windows in shopping districts create momentary stoppage of curious pedestrians. This is a desired element of a successful street. These window watchers take up about 18 to 24 inches of space. The remaining sidewalk width will be constrained. This is often desirable on sidewalks not at capacity. But if this stoppage forces pedestrians into the roadway, the sidewalk is too narrow.

Newspaper racks, mail boxes, and other street furniture should not encroach into the walking space. Either place these items in the nature strip, or create a separate storage area behind the sidewalk, or in a corner or mid-block bulb-out. These items need to be bolted in place.

Parking meters on a narrow sidewalk create high levels of discomfort. In a retrofit situation, place meters at the back of the walk, or use electronic parking meters every 50 or 100 feet.

Parking garages on commercial district walks are ideally placed away from popular walking streets. If this cannot be done, keep the driveways and curb radii tight to maximize safety and to minimize the discomfort to pedestrians.

Grade

If possible, grade should be kept to no more than 5 percent, and, terrain permitting, avoid grades greater

than 8 percent. When this is not possible, railings and other aids can be considered to help elder adults. The Americans With Disabilities Act (ADA) does not require designers to change topography, but only to work within its limitations and constraints. Do not create any man-made grade that exceeds 8 percent.

Stairs

Since falls are common with poorly designed stairs, every effort should be made to create a slip-free, easily detected, well-constructed set of stairs. The following principles apply: Stairs require railings on at least one side, and they need to extend 18 inches beyond the top and bottom stair. When an especially wide set of stairs is created, such as at transit stations, consider rails on both sides and one or two in mid-stair areas. Avoid open risers, and use a uniform grade with a constant tread to rise along the stairway length. All steps need to be obvious. Stairs should be lit at night. A minimum stairway width is 42 inches (to allow two people to pass). The forward slope should be 1 percent in order to drain water. Stairs in high nightlife pedestrian centers can be lit both above and at the side.

Landscaping

“Landscaping should be provided for esthetic and erosion control purposes in keeping with the character of the street and its environment. Landscaping should be arranged to permit sufficiently wide, clear, and safe pedestrian walkways. Combinations of turf, shrubs, and trees are desirable in border areas along the roadway. However, care should be exercised to ensure that guidelines for sight distances and clearance to obstructions are observed, especially at intersections.” (AASHTO, *A Policy on Geometric Design of Highways & Streets*, 1990)

Landscaping can also be used to partially or fully control crossing points of pedestrians. Low shrubs in commercial areas and near schools are often desirable to channel pedestrians to crosswalks or crossing areas.

Sidewalks must be graded and placed in areas where water will not pond or where large quantities of water will not sheet across.

Rural Sidewalks

Sidewalks along rural roadway sections should be provided as near the right-of-way line as is practicable. If a swale is used, the sidewalk should be placed at the back of the swale. If a guardrail is used, the sidewalk must be at the back of the guardrail. There will be times in near-urban spaces where the placement of sidewalks is not affordable or feasible. Wide paved shoulders on both sides of the roadway will be an appropriate substitute in some cases. However, the potential for growth in near-urban areas requires that rights-of-way be preserved. When sidewalks are placed at the back of the right-of-way, it may be necessary to bring the walkways forward at intersections in order to provide a roadway crossing where it will be anticipated by motorists. Security issues are also important on rural area sidewalks, so street lighting should be given full consideration. This lighting can act as part of the transitional area alerting higher speed motorists that they are arriving in an urban area.

Bridge Sidewalks

Bridge crossings are essential to pedestrians and bicyclists. Whenever possible, the sidewalks should be continued with their full width. Sidewalks on bridges should be placed to eliminate the possibility of falling into the roadway or over the bridge itself. Sidewalks should be placed on both sides of bridges. Under extreme conditions, sidewalks can be used on one side only, but this should only be done when safe crossings can be provided on both ends of the bridge. When sidewalks are placed on only one side, they should be wider in order to accommodate large volumes of pedestrian traffic.

Corners

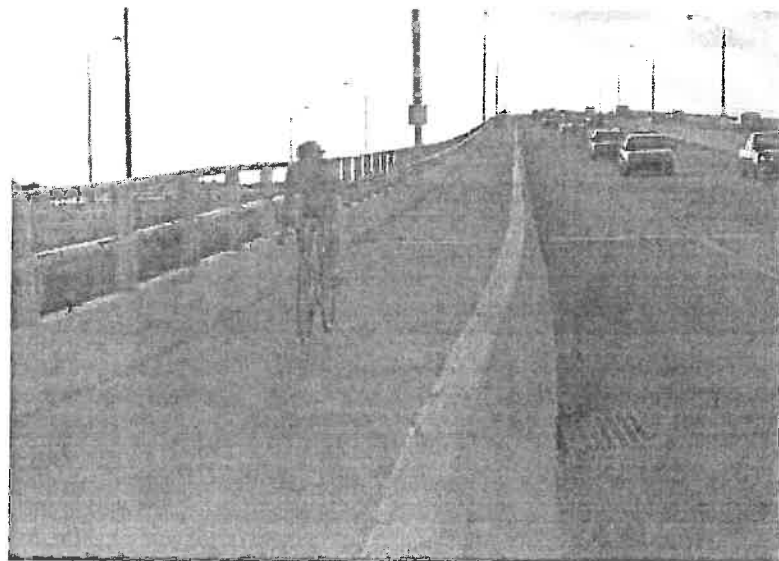
Management of land on the corner is essential to the successful commercial street. This small public space is used to enhance the corner sight triangle; to permit underground piping of drainage so that street water can be captured on both sides of the crossing; to provide a resting place and telephone; to store pedestrians waiting to cross the roadway; and to provide

other pedestrian amenities. Well-designed corners, especially in a downtown or other village-like shopping district can become a focal point for the area. Benches, telephones, newspaper racks, mailboxes, bike racks, and other features help enliven this area. Corners are often one of the most secure places on a street. An unbuilt corner, in contrast, is often a magnet for litter and it erodes the aesthetics of the street.

13.3 Street Lighting

For both safety and security reasons, most sidewalks require street lighting. Lighting is needed for both lateral movement of pedestrians and for detection by motorists when the pedestrian crosses the roadway. As a general rule, the normal placement of street luminaries, such as cobra heads, provide sufficient lighting to ensure pedestrian movement. However, in commercial districts, it is often important to improve the level of lighting, especially near ground level. Successful retail centers often use low street lamps in addition to or in lieu of high angle lamps. Some designs permit both the high angle highway lamp and the low angle street lamp on the same pole.

Pedestrians on a pedestrian-oriented street design (shopping district) require three sources of lighting. The first is the overall street lighting, the second is the low placement of lamps (usually tungsten) that reach between and below most trees, and the third is



the light emitted from stores that line the street. The omission of any one of these lights can result in an undesirable effect, and can reduce the desire to walk or shop at night.

Lights are needed in all areas where there are crosswalks or raised channel islands. Lighting can be either direct or can be placed to create a silhouette effect. Either treatment aids the motorist in detecting the pedestrian.

Pedestrians are less attracted to a commercial zone, or any area where there are dark spots. The potential to be victimized keeps many pedestrians from traveling through an area at night. Thus, lighting from shops, street lamps, and highway luminaries are essential to the success of a commercial district. Even one dark spot along a block may force some pedestrians to the opposite side of the street.

13.4 Sidewalk Placement

Sidewalks are recommended on both sides of all urban arterial, collector, and most local roadways. Although local codes vary, AASHTO and other national publications insist that separation of the pedestrian from motorized traffic is an essential design feature of a safe and functional roadway.

Although the AASHTO Policy on Geometric Design of Highways and Streets (Greenbook) does not fully address the issue of sidewalk placement, in lightly



Pedestrians on a pedestrian-oriented street (shopping district) require three sources of lighting.

developed areas, the Greenbook does recommend that rights-of-way be preserved on all arterial and collector roadways. Although AASHTO and many other organizations suggest that some short sections of local streets can have sidewalks on one side only, the designer should consider that single-side sidewalks can create unwanted motorist/pedestrian conflicts.

Priority Construction of Sidewalks

Many communities, such as Tallahassee, Florida, have small (\$250,000), but significant, sidewalk construction funds set aside for community development and pedestrian safety. When prioritizing missing sidewalks, it is important to provide sidewalks to fill gaps on arterials and collectors at the following locations:

- Schools (within 1/4 mile).
- To all transit stops.
- Parks, sports arenas.
- Shopping districts, other commercial areas.
- Recreational corridors.
- Retirement homes.
- Medical complexes/hospitals.
- All public buildings.

Costs and Benefits of Sidewalks

A typical neighborhood lot sidewalk of 5 feet and two street border trees raise the cost of the undeveloped lot by 1 to 3 percent. In comparison, residential lot streets with sidewalks and trees often show an increased property value of \$3,000 to \$5,000.

13.5 Ambiance, Shade, and Other Sidewalk Enhancements

The above discussion provides a basis for meeting the most basic needs of a pedestrian. In many parts of a city, it is essential to create highly successful walking corridors. The following elements are often

found to be desirable to achieve robust commercial activity and to encourage added walking versus single-occupant motor vehicle trips. One or two very attractive features create a highly successful block ... and one or two highly offending or unsafe conditions will leave one side of the street nearly vacant.

Trees

It is hard to imagine any successful walking corridor fully void of trees. The richness of a young or mature canopy of trees cannot be matched by any amount of pavers, colorful walls or other fine architecture, or other features. Although on higher speed roads (40 mph and above) trees are often set at the back of the sidewalk, the most charming streets are those with trees gracing both sides of a walkway. This canopy effect has a quality that brings pedestrians back again and again. If only one side can be achieved, then on low-speed roadways, again the trees are best if placed between the walkway and the curb. A 4-foot setback from the curb is required.

In older pre-WW II neighborhoods, trees were often placed every 25, 30, or 35 feet apart. It is essential to keep trees back far enough from the intersection to leave an open view of traffic. With bulb-outs, this can often allow trees near the corner.

Paver Stones

Colorful brick, stone, and even tile ceramics are often used to define corners, to create a mood for a block or commercial district, or to help guide those with visual impairments. These bricks or pavers need to be set on a concrete pad for maximum life and stability.

Paver stones can also be used successfully in neighborhoods. Denmark is one of many European countries that use concrete 1-meter-square paver stones as sidewalks. These stones are placed directly over compressed earth. When it is time to place new utilities, or to make repairs, the paver stones are simply lifted, stacked, and replaced when the work is complete.



The designer of this pre-WW II neighborhood in Birmingham, AL knew the value of street trees.

Awnings

Retail shops should be encouraged to provide protective awnings to create shade, protection from rain and snow, and to otherwise add color and attractiveness to the street. Awnings are especially important in hot climates on the sunny side of the street.

Outdoor Cafes

There are many commercial actions that can help bring back life to a street. Careful regulation of street vendors, outdoor cafes, and other commercial activity, including street entertainers, help enliven a place. The more activity, the better. One successful outdoor cafe helps create more activity and, in time, an entire evening shopping district can be helped back to life. When outdoor cafes are offered, it is essential to maintain a reasonable walking passageway. The elimination of two or three parking spaces in the street and the addition of a bulb-out area can often provide the necessary extra space when cafe seating space is needed.

Alleys and Narrow Streets

Alleys can be cleaned up and made attractive for walking. Properly lit and planned they can be secure and inviting. Some alleys can be covered over and made into access points for a number of shops. The tasteful and elegant Bussy Place alley in Boston was a run-down alley between buildings. With a roof overhead and a colorful interior with escalators, this



Alleys can be made attractive and can serve as access points to shops.

alley is now the grand entry to a number of successful downtown shops. Other alleys become attractive places for outdoor cafes, kiosks, and small shops.

Victoria, on Vancouver Island, British Columbia, has a host of 30 or more alleys that channel a major portion of its pedestrian traffic between colorful buildings and quaint shops. Some alleys that were originally hard-wood bricks are now polished and provide a true walk through history.

The expansion of a mid-block set of crossings can help make these alleyways a prime commercial route and can lessen some of the pedestrian activity on several main roads.

Kiosks

Small tourist centers, navigational kiosks, and attractive outlets for other information can be handled through small-scale or large-scale kiosks. Well-positioned interpretive kiosks, plaques, and other instructional or historic place markers are essential to visitors. These areas can serve as safe places for people to meet and can generally help with navigation.

Play Areas and Public Art

Public play areas and interactive art can help enliven a corner or central plaza. One especially creative linear space in Norway provided a fence and a 40-foot-long jumping box. Children were invited to see how far they could jump, and compare their jump with record holders, kangaroos, grasshoppers, dogs, and other critters.

Pedestrian Streets, Transit Streets, and Pedestrian Malls

A number of European cities are reclaiming streets that are no longer needed for cars. Cars still have access to many of these streets before 10:00 a.m. and after midnight. Other streets in both the East and West are being converted to transit and pedestrian streets (e.g., 15th Street Mall in Denver). These conversions need to be made with a master plan so that traffic flow and pedestrian movements are fully provided for. There are many streets in America that

have been temporarily converted to pedestrian streets and later, following a lack of use, were then converted back to traffic. There are many instances where it is not possible to generate enough pedestrian traffic to keep a street "alive." Under these conditions, the presence of on-street auto traffic creates security for the pedestrian.

13.6 Pedestrian Plazas

Many plazas constructed in the recent past have been too large and uncomfortable for pedestrians, serving more to enhance the image of the building on the lot. Some of these are products of zoning laws that encouraged plaza construction in exchange for increased building height. However, bonus systems haven't ensured that the "public space" will actually be a public benefit. Decisions have been based on inches and feet, instead of on activity, use, or orientation. The result has been a number of plazas with problems: some are windswept, others are on the shady side of buildings, while others break the continuity of shopping streets, or are inaccessible because of grade changes. Most are without benches, planters, cover, shops, or other pedestrian comforts. To be comfortable, large spaces should be divided into smaller ones. Landscaping, benches, and wind and rain protection should be provided, and shopping and eating should be made accessible.

It has been demonstrated that *no* extra room should be provided. In fact, it is usually better to be a bit crowded than too open, and to provide many smaller

spaces instead of a few large ones. It is better to have places to sit, planters, and other conveniences for pedestrians than to have a clean, simple, and "architectural" space. It is better to have windows for browsing and stores adjacent to the plaza space, with cross-circulation between different uses than to have the plaza serve one use. It is better to have retailers rather than offices border the plaza. And, finally, it is better to have the plaza be a part of the sidewalk instead of separated from the sidewalk by walls.



Small protected spaces provide separation from noise and traffic.

- Enclose a plaza on one or two sides.
- Plan for at least 20 percent of the plaza to be landscaped.
- Provide seating in the sun and make it readily accessible to the public.
- Develop shops and stores along the plazas, excluding large banks, travel agents, and offices that attract few pedestrians.
- Do not use large expanses of blank wall.

Where is the best place for a plaza? Plazas ideally should be located in places with good sun exposure and little wind exposure, in places that are protected from traffic noise and in areas that are easily accessible from streets and shops. A plaza should have a center as well as several sub-centers.

The planner should inventory downtown for spaces that can be used for plazas, especially small ones. Appropriate spaces include: space where buildings may be demolished and new ones constructed, vacant land, or streets that may be closed to traffic or may connect to parking.

New stores can sometimes be set back 8 to 10 feet from the street to allow plaza space in exchange for increased density.

Some suggestions for planners and developers of plazas include the following:

- Limit plaza size to create small, human-scaled spaces. A maximum size of 2,500 square feet is appropriate, with several small plazas being better than one large one.

- Plan for prevailing sun angles and climatic conditions, using as a rule of thumb a minimum of 20 percent of daily sunshine hours on March 21.
- Encourage the use of bandstands, public display areas, outdoor dining space, skating rinks, and other features which attract crowds. In cold or rainy areas, a covered galleria would benefit pedestrians more than an open plaza.
- Integrate indoor and outdoor space to make it more useful. Plan spaces to be small and informal in character and quality so as to be inviting, comfortable, and non-oppressive.



In some European countries, streets have been turned over to pedestrians.

- Avoid sunken plazas, since access is difficult and people feel uncomfortable in them. Keep them level or just slightly below sidewalk grade. For instance, at Rockefeller Center in New York City, the lower level originally had shops, that failed and were converted to the now famous ice skating rink. Most people view the rink from above, while only users go below.
- Avoid architectural and geometrical bench arrangements. Instead, consider where and how most people would prefer to sit. One reason so-called “undesirables” frequent many plazas is that benches are not usable by pedestrians. Movable chairs, heavy enough not to be stolen, but light enough to move, are recommended so that people can choose where they want to sit and what arrangement they prefer.



Streets with a raised median will usually have lower pedestrian crash rates.

developed at a conceptual level. You should prepare a plan view drawing with enough information to identify major existing features, proposed improvements, and impacts. Profile and cross-section view drawings are also helpful in presenting particular details required to construct your proposed improvements. Aerial photographs and U.S. Geological Survey topographic maps often provide a good background for overlaying proposed improvements.

Part 2

Conduct a pedestrian capacity analysis for the Piedmont Park case study location (as described

in Exercise 3.8 of Lesson 3) using procedures described in the *Highway Capacity Manual*. The four major park entrances, as indicated on the Site Location Map, should be evaluated to determine the pedestrian level of service (LOS). In order to conduct this evaluation, the following assumptions should be utilized:

- Expand 15-minute pedestrian counts included in the park usage data to represent hourly volumes.
- All of the pedestrian volume at each of the four entrances accesses the park on existing 5-foot-wide feet wide sidewalks.

Utilize and document other assumptions as necessary in order to conduct the LOS analysis. Be sure to evaluate the sensitivity of values related to your assumptions.

Determine the existing level of service for pedestrians at the four major park entrances. Do the sidewalks need to be widened? In addition, evaluate pedestrian level of service under the following scenarios:

13.7 Exercise: Design a Pedestrian Space

Part 1

Choose an existing public space that currently does not encourage walking and redesign it to better accommodate pedestrians. Your plan should be



- Average weekday pedestrian traffic is anticipated to double in 5 years, will 5-foot-wide sidewalks be adequate?
- Special events will generate pedestrian volumes five times those measured for an average weekday.

13.8 References

Text and graphics for this lesson were derived from the following sources:

Florida Department of Transportation, *Florida's Pedestrian Planning and Design Guidelines*, 1997.

Oregon Department of Transportation, *Oregon's Bicycle and Pedestrian Plan*, 1995.

Richard Untermann, *Accommodating the Pedestrian*, 1984.

Wilmington Area Planning Council, *Mobility-Friendly Design Standards*, 1997.

For more information on this topic, please refer to:

AASHTO, *A Policy on Geometric Design of Highways & Streets*, 1990.

Institute of Transportation Engineers, *Design and Safety of Pedestrian Facilities*, 1998.

Office of Transportation Engineering and Development, *Pedestrian Design Guidelines Notebook*, Portland, OR, 1997.

ATTACHMENT D

Google Maps grocery store within 2 miles of me

